



**CENTRAL LUZON STATE UNIVERSITY**



**EVALUATION OF MOLLUSCICIDAL PROPERTY OF *Euphorbia pulcherrima* Willd. PLANT EXTRACT AGAINST GOLDEN APPLE SNAIL (*Pomacea canaliculata* L.)**

**CHRISTINE MAE CELARIO PATRICIO**

An Undergraduate Thesis Submitted to the Faculty of the Department of Biological Sciences, College of Arts and Sciences, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines, In Partial Fulfillment of the Requirements for the Degree

**BACHELOR OF SCIENCE IN BIOLOGY**

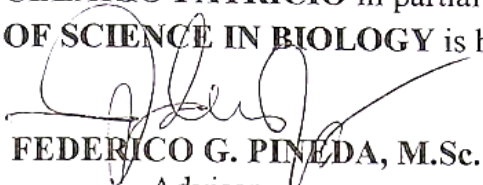
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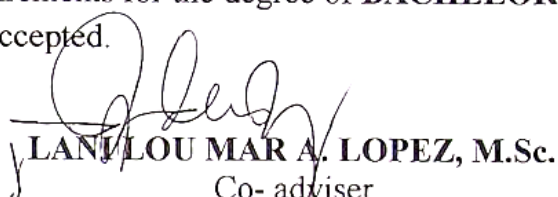
COLLEGE OF ARTS AND SCIENCES  
 Department of Biological Sciences

**APPROVAL SHEET**

The Undergraduate Thesis entitled: **EVALUATION OF MOLLUSCICIDAL PROPERTY OF *Euphorbia pulcherrima* Willd. PLANT EXTRACT AGAINST GOLDEN APPLE SNAIL (*Pomacea canaliculata* L.)** prepared and submitted by **CHRISTINE MAE CELARIO PATRICIO** in partial fulfilment of the requirements for the degree of **BACHELOR OF SCIENCE IN BIOLOGY** is hereby approved and accepted.

  
**FEDERICO G. PINEDA, M.Sc.**  
 Adviser

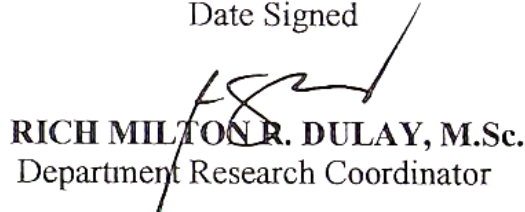
06-13-17  
 Date Signed

  
**LANI LOU MAR A. LOPEZ, M.Sc.**  
 Co- adviser

06-13-17  
 Date Signed

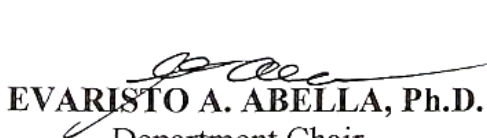
  
**MARY JHANE G. VALENTINO, M.Sc.**  
 Critic

06-13-17  
 Date Signed

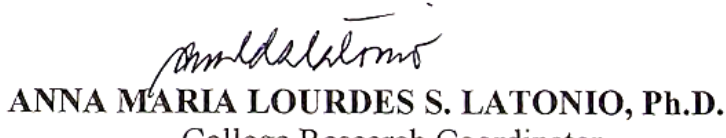
  
**RICH MILTON R. DULAY, M.Sc.**  
 Department Research Coordinator

06-13-17  
 Date Signed

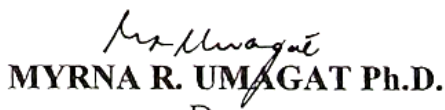
Accepted in partial fulfillment of the requirements for the degree of **BACHELOR OF SCIENCE IN BIOLOGY**.

  
**EVARISTO A. ABELLA, Ph.D.**  
 Department Chair

06-13-17  
 Date Signed

  
**ANNA MARIA LOURDES S. LATONIO, Ph.D.**  
 College Research Coordinator

06-13-17  
 Date Signed

  
**MYRNA R. UMAGAT Ph.D.**  
 Dean

06-13-17  
 Date Signed



**BIOGRAPHICAL SKETCH**

**PERSONAL INFORMATION**

Full name: Christine Mae Celario Patricio

Birthday: July 1, 1995

Age: 21

Gender: Female

Citizenship: Filipino

Civil Status: Single

Religion: Roman Catholic

Residence: Brgy. Sto. Tomas, San Jose City, Nueva Ecija

Parents: Mr. Teddy B. Patricio

Mrs. Mary Ann C. Patricio



**EDUCATIONAL BACKGROUND**

Tertiary level : Central Luzon State University  
Bachelor of Science in Biology  
Science City of Munoz Nueva Ecija  
2012- present

Secondary level : Munoz National Highschool  
Science City of Munoz Nueva Ecija  
2008-2012

Elementary level : Sto. Tomas Elementary School  
San Jose City, Nueva Ecija  
2002-2008

**SEMINARS ATTENDED:**

Seminar on “Bio Product Development for Sustainable Agriculture”  
Research, Extension and Training  
Central Luzon State University  
Science City of Muñoz, Nueva Ecija  
April 26, 2017



Symposium on “Philippine Biodiversity and the National Museum”

University Auditorium

Central Luzon State University

March 22, 2016

Symposium on HIV: AIDS “Survival of the Fittest. The Human Culture Media”

University Auditorium

Central Luzon State University

Science City of Muñoz, Nueva Ecija

November 21, 2015

Symposium on “Current Trends in Food and Safety”

University Gymnatorium

Central Luzon State University

Science City of Muñoz, Nueva Ecija

August 30, 2014

Seminar on “Uplifting the Spirit of Volunteerism and Excellence”

Society for the Advancement of Volunteerism and Excellence Nueva Ecija

Highland Villa, Baguio City, Benguet

January 11-13, 2013

Seminar on “Information/Education Campaign on University Comprehensive Environmental Management Plan”

Research, Extension and Training

Central Luzon State University

Science City of Muñoz, Nueva Ecija

July 18, 2012

### **ON THE JOB TRAINING**

On –the- Job -Training on Advanced Freshwater Aquaculture Technology

Bureau of Fisheries and Aquatic Resources- National Freshwater Fisheries

Technology Center, CLSU Compound Science City of Munoz, Nueva Ecija

June 13- July 13, 2016



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ABSTRACT

**PATRICIO, CHRISTINE MAE C.** Bachelor of Science in Biology, Biological Sciences, College of Arts and Sciences, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines, June 2017. **EVALUATION OF MOLLUSCICIDAL PROPERTY OF *Euphorbia pulcherrima* Willd. PLANT EXTRACT AGAINST GOLDEN APPLE SNAIL (*Pomacea canaliculata* L.)**

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**Adviser:** Federico G. Pineda, MSc

**Co-adviser:** Lani Lou Mar A. Lopez, MSc

This study was conducted to evaluate the molluscicidal property of ethanolic extract of *Euphorbia pulcherrima* Willd. against young and adult golden apple snails (*Pomacea canaliculata* L.) and to determine the phytochemical composition of the plant extract used. The ethanolic extracts was subjected to bioassay using spray method for the determination of the golden apple snail mortality rate after 24, 48 and 72 hours of exposure to different treatments

The results show that *E. pulcherrima* Willd. plant extract can be a potential source of plant molluscicide. Statistical analysis shows that 24-72 hours of exposure to 1000ppm of the plant extract has the highest mortality and is the best treatment for both young and adult golden apple snails among plant extract.

Moreover, molluscicidal property of *E. pulcherrima* Willd. plant extract can be associated with the present bioactive compounds saponins, tannins, cardiac glycosides and coumarin. However, phlobatannins, flavonoids, alkaloids and terpenoids were absent



The effectiveness of ethanolic extracts was evident in all treated golden apple snails. The ethanolic extract of *E. pulcherrima* Willd. plant studied is potential source of natural molluscicide.



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